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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,432	10/10/2003	Gary Tepper	02940179BA	2121
30743 7590 03/04/2008 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			EXAMINER CHOI, LING SIU	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 03/04/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/682,432		TEPPER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ling-Siu Choi		1796	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 43-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/10/2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to the Response to the Election/Restriction filed 10/27/2007. Claims 1-42 and 46-80 were canceled and Claims 43-45 are now pending, which are drawn to a polymeric material made with a molecular imprinting process.

#### ***Claim Objections***

2. Claims 43-45 are objected to because of the following informalities: claim 43, line 5, "introducing a template into said particles which does not covalently bind to said monomers" is suggested to be changed to --introducing a template into said particles, which does not covalently bind to said monomers--.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

**The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

4. Claims 43-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43, the recitation of "A polymeric material with a molecular imprint" (line 1) causes indefiniteness because the template is extracted from the composite particle at the end of process and the resulting polymeric material would not contain the molecular imprint (line 10 - "extracting said template from said composite particles").

Claim 43, the recitation of "said template is not bound to said polymer" causes indefiniteness because the template is not bound to the polymer, it would not lead to "arrangement of chemical functional groups complementary to said template" (lines 12-13). See Domb (US 5,630,978) – "Two approaches to molecular imprinting have been developed. **In the first method**, a template is covalently bound to a polymerizable monomer, and after polymerization, the covalent bond is cleaved to release the template from the polymeric mold. **In the second method**, polymerizable monomers arrange themselves about a template based on noncovalent interactions (such as ionic, hydrophobic, steric, electrostatic, and hydrogen bonding interactions), and after polymerization, the non-covalently bound template is simply leached out" (col. 1, lines 38-47).

### ***Claim Analysis***

#### **5. Summary of Claim 43:**

A polymeric material with a molecular imprint made by a process comprising	
A	expanding a mixture containing a propellant and monomers to form particles
B	introducing a template into the particles which does not covalently bind to the monomers
C	polymerizing the particles in the presence of the template to form composite particles having polymer and template, wherein the template is not bound to said polymer
D	extracting said template from the composite particles without distorting a morphology of the composite particles to provide polymerized particles imprinted by the template with a size and arrangement of chemical functional groups complementary to the template.

***Claim Rejections – 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Mosbach et al. (US 5,959,050).

Mosbach et al. disclose a molecularly imprinted support comprising substantially spherical, uniformly shaped, and non-aggregated particles, wherein the particles are prepared by the suspension polymerization process comprising (A) providing a polymerizable composition containing at least two distinct acrylate monomers, at least one porogenic solvent, at least one fluorine-containing liquid, at least one fluorine-containing copolymer, and at least one print molecule; (B) executing suspension polymerization on the polymerizable composition to yield substantially spherical polymer particles; (C) isolating the spherical particles from the porogenic solvent and the fluorine-containing liquid; and (D) removing the print molecule from the spherical particles and wherein the particles have a diameter of about 2 to about 100 microns depending on the amount of stabilizing polymer or agitating technique (claims 1-3 and 15; col. 3, lines 30-33). It is noted that the molecularly imprinted support is made by suspension polymerization instead of the claimed process to produce the particles under a supercritical condition. The caselaw has held that [E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964,966 (Fed. Cir. 1985). Thus, the present claims are anticipated by the disclosure of Mosbach et al.

### **Conclusion**

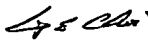
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
LING-SUI CHOI  
PRIMARY EXAMINER

January 4, 2008